

**WHAT IS CLAIMED IS:**

1        1. A method of operating a radio access network of a telecommunications  
2        system, the method comprising using a omnibus release message to release plural  
3        connections handled by the radio access network.

1        2. The method of claim 1, wherein the radio access network comprises a radio  
2        network control (RNC) node, and wherein the method further comprises:

3                preparing the omnibus release message whereby, when a first selected parameter  
4        thereof has a predetermined value, all radio connections controlled by the radio network  
5        control (RNC) node are released.

1        3. The method of claim 2, wherein when the first selected parameter is in a  
2        reserved range of values, all radio connections controlled by the radio network control  
3        (RNC) node are released.

1        4. The method of claim 2, wherein the radio network control (RNC) node is a  
2        serving radio network control (SRNC) node, and further comprising preparing the  
3        omnibus release message upon failure of the serving radio network control (SRNC)  
4        node.

1        5. The method of claim 2, wherein the first selected parameter is included in a  
2        mobile terminal global identity information element of the omnibus release message.

1        6. The method of claim 5, wherein the first selected parameter is included in a  
2        Radio Network Temporary Identity (U-RNTI) information element of the omnibus  
3        release message.

1        7. The method of claim 6, wherein the first selected parameter is a Serving  
2        Radio Network Temporary Identity (S-RNTI) information element of the omnibus  
3        release message.

1        8. The method of claim 1, wherein the radio access network comprises a radio  
2        network control (RNC) node, and wherein the method further comprises:

3 preparing the omnibus release message whereby, when a first selected parameter  
4 thereof has a first predetermined value and a second selected parameter thereof has a  
5 second predetermined value, all radio connections in cells controlled by the radio  
6 network control (RNC) node are released.

1 9. The method of claim 8, wherein when the first selected parameter is in a first  
2 reserved range of values, all radio connections in cells controlled by the radio network  
3 control (RNC) node are released.

1 10. The method of claim 8, wherein when the second selected parameter is in a  
2 second reserved range of values, all radio connections in cells controlled by the radio  
3 network control (RNC) node are released.

1 11. The method of claim 8, wherein the radio network control (RNC) node is a  
2 drift radio network control (DRNC) node, and further comprising preparing the  
3 omnibus release message upon failure of the drift radio network control (DRNC) node.

1 12. The method of claim 8, wherein the first selected parameter is included in a  
2 mobile terminal global identity information element of the omnibus release message.

1 13. The method of claim 12, wherein the first selected parameter is included in a  
2 Radio Network Temporary Identity (U-RNTI) information element of the omnibus  
3 release message.

1 14. The method of claim 13, wherein the first selected parameter is in a Serving  
2 Radio Network Temporary Identity (S-RNTI) information element of the omnibus  
3 release message.

1 15. The method of claim 8, wherein the second selected parameter is included in  
2 a parameter which identifies a serving radio network control (SRNC) node.

1 16. The method of claim 1, further comprising transmitting the omnibus release  
2 message on a common control channel (CCCH) when a mobile terminal is in a  
3 CELL\_FACH state.

1        17. The method of claim 1, further comprising transmitting the omnibus release  
2 message on a paging channel (PCH).

1        18. The method of claim 1, wherein the radio access network comprises a  
2 serving radio network controller node and a drift radio network controller node, and  
3 wherein the method further comprises:

4            sending from the serving radio network controller node to the drift radio network  
5 controller node a request for release of connections with mobile terminals controlled by  
6 the serving radio network controller node in cells controlled the drift radio network  
7 controller node;

8            sending the omnibus release message from the drift radio network controller  
9 node to base station(s) controlled by the drift radio network controller node.

1        19. The method of claim 1, wherein the radio access network comprises a  
2 serving radio network controller node and a drift radio network controller node, and  
3 wherein the method further comprises:

4            receiving at the drift radio network controller node an indication of a loss of  
5 connection with the serving radio network controller node;

6            sending the omnibus release message from the drift radio network controller  
7 node to base station(s) controlled by the drift radio network controller node with respect  
8 to connections with mobile terminals controlled by the serving radio network controller  
9 node in cells controlled the drift radio network controller node.

1        20. A radio access network of a telecommunications system, radio access  
2 network comprising a radio network control (RNC) node which prepares a omnibus  
3 release message to release plural connections handled by the radio access network.

1        21. The radio access network of claim 20, wherein when a first selected  
2 parameter of the omnibus release message has a predetermined value, all radio  
3 connections controlled by the radio network control (RNC) node are released.

1        22. The radio access network of claim 21, wherein when the first selected  
2 parameter is in a reserved range of values, all radio connections controlled by the radio  
3 network control (RNC) node are released.

1        23. The radio access network of claim 21, wherein the radio network control  
2 (RNC) node is a serving radio network control (SRNC) node, and wherein the serving  
3 radio network control (SRNC) node prepares the omnibus release message upon failure  
4 of the serving radio network control (SRNC) node.

1        24. The radio access network of claim 21, wherein the first selected parameter is  
2 included in a mobile terminal global identity information element of the omnibus  
3 release message.

1        25. The radio access network of claim 24, wherein the first selected parameter is  
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the  
3 omnibus release message.

1        26. The radio access network of claim 25, wherein the first selected parameter is  
2 in a Serving Radio Network Temporary Identity (S-RNTI) information element of the  
3 omnibus release message.

1        27. The radio access network of claim 20, wherein when a first selected  
2 parameter of the omnibus release message has a first predetermined value and a second  
3 selected parameter of the omnibus release message has a second predetermined value,  
4 all radio connections in cells controlled by the radio network control (RNC) node are  
5 released.

1        28. The radio access network of claim 27, wherein when the first selected  
2 parameter is in a first reserved range of values, all radio connections in cells controlled  
3 by the radio network control (RNC) node are released.

1        29. The radio access network of claim 27, wherein when the second selected  
2 parameter is in a second reserved range of values, all radio connections in cells  
3 controlled by the radio network control (RNC) node are released.

1        30. The radio access network of claim 27, wherein the radio network control  
2 (RNC) node is a drift radio network control (DRNC) node, and wherein the drift radio  
3 network control (DRNC) node prepares the omnibus release message upon failure of  
4 the drift radio network control (DRNC) node.

1       31. The radio access network of claim 27, wherein the first selected parameter is  
2 included in a mobile terminal global identity information element of the omnibus  
3 release message.

1       32. The radio access network of claim 31, wherein the first selected parameter is  
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the  
3 omnibus release message.

1       33. The radio access network of claim 32, wherein the first selected parameter is  
2 in a Serving Radio Network Temporary Identity (S-RNTI) information element of the  
3 omnibus release message.

1       34. The radio access network of claim 27, wherein the second selected  
2 parameter is included in a parameter which identifies a serving radio network control  
3 (SRNC) node.

1       35. The radio access network of claim 20, wherein the omnibus release message  
2 is transmitted on a common control channel (CCCH) when a mobile terminal is in a  
3 CELL\_FACH state.

1       36. The radio access network of claim 20, wherein the omnibus release message  
2 is transmitted on a paging channel (PCH).

1       \*37. The radio access network of claim 20, further comprising a serving radio  
2 network controller node and a drift radio network controller node, and wherein the  
3 serving radio network controller node sends to the drift radio network controller node a  
4 request for release of connections with mobile terminals controlled by the serving radio  
5 network controller node in cells controlled the drift radio network controller node; and  
6 wherein the drift radio network controller node sends the omnibus release message to  
7 base station(s) controlled by the drift radio network controller node.

1       38. The radio access network of claim 20, further comprising a serving radio  
2 network controller node and a drift radio network controller node, wherein the drift  
3 radio network controller node receives an indication of a loss of connection with the  
4 serving radio network controller node, and thereafter sends the omnibus release

5 message to base station(s) controlled by the drift radio network controller node with  
6 respect to connections with mobile terminals controlled by the serving radio network  
7 controller node in cells controlled the drift radio network controller node.

1 39. A radio network control (RNC) node of a radio access network of a  
2 telecommunications system which prepares a omnibus release message to release plural  
3 connections handled by the radio access network.

1 40. The radio network control (RNC) node of claim 39, wherein when a first  
2 selected parameter of the omnibus release message has a predetermined value, all radio  
3 connections controlled by the radio network control (RNC) node are released.

1 41. The radio network control (RNC) node of claim 40, wherein when the first  
2 selected parameter is in a reserved range of values, all radio connections controlled by  
3 the radio network control (RNC) node are released.

1 42. The radio network control (RNC) node of claim 41, wherein the radio  
2 network control (RNC) node is a serving radio network control (SRNC) node, and  
3 wherein the serving radio network control (SRNC) node prepares the omnibus release  
4 message upon failure of the serving radio network control (SRNC) node.

1 43. The radio network control (RNC) node of claim 38, wherein the first  
2 selected parameter is included in a mobile terminal global identity information element  
3 of the omnibus release message.

1 44. The radio network control (RNC) node of claim 43, wherein the first  
2 selected parameter is included in a Radio Network Temporary Identity (U-RNTI)  
3 information element of the omnibus release message.

1 45. The radio network control (RNC) node of claim 44, wherein the first  
2 selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)  
3 information element of the omnibus release message.

1 46. The radio network control (RNC) node of claim 39, wherein when a first  
2 selected parameter of the omnibus release message has a first predetermined value and

3       a second selected parameter of the omnibus release message has a second  
4       predetermined value, all radio connections in cells controlled by the radio network  
5       control (RNC) node are released.

1       47. The radio network control (RNC) node of claim 46, wherein when the first  
2       selected parameter is in a first reserved range of values, all radio connections in cells  
3       controlled by the radio network control (RNC) node are released.

1       48. The radio network control (RNC) node of claim 46, wherein when the  
2       second selected parameter is in a second reserved range of values, all radio connections  
3       in cells controlled by the radio network control (RNC) node are released.

1       49. The radio network control (RNC) node of claim 46, wherein the radio  
2       network control (RNC) node is a drift radio network control (DRNC) node, and  
3       wherein the drift radio network control (DRNC) node prepares the omnibus release  
4       message upon failure of the drift radio network control (DRNC) node.

1       50. The radio network control (RNC) node of claim 46, wherein the first  
2       selected parameter is included in a mobile terminal global identity information element  
3       of the omnibus release message.

1       51. The radio network control (RNC) node of claim 50, wherein the first  
2       selected parameter is included in a Radio Network Temporary Identity (U-RNTI)  
3       information element of the omnibus release message.

1       52. The radio network control (RNC) node of claim 51, wherein the first  
2       selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)  
3       information element of the omnibus release message.

1       53. The radio network control (RNC) node of claim 46, wherein the second  
2       selected parameter is included in a parameter which identifies a serving radio network  
3       control (SRNC) node.

1       54. The radio network control (RNC) node of claim 39, wherein the omnibus  
2 release message is transmitted on a common control channel (CCCH) when a mobile  
3 terminal is in a CELL\_FACH state.

1       55. The radio network control (RNC) node of claim 39, wherein the omnibus  
2 release message is transmitted on a paging channel (PCH).

1       56. The radio network control node of claim 39, wherein the radio network  
2 control node is a drift radio network control node which receives from a serving radio  
3 network control node a request for release of connections with mobile terminals  
4 controlled by the serving radio network controller node in cells controlled the drift  
5 radio network controller node; and wherein the drift radio network controller node  
6 sends the omnibus release message to base station(s) controlled by the drift radio  
7 network controller node.

1       57. The radio network control node of claim 39, wherein the radio network  
2 control node is a drift radio network control node which receives an indication of a loss  
3 of connection with the serving radio network controller node, and which thereafter  
4 sends the omnibus release message to base station(s) controlled by the drift radio  
5 network controller node with respect to connections with mobile terminals controlled  
6 by the serving radio network controller node in cells controlled the drift radio network  
7 controller node.

1       58. A mobile terminal which, upon receipt of a release message from a radio  
2 access network of a telecommunications system, releases its radio connection with the  
3 radio access network when a first selected parameter of the omnibus release message  
4 has a predetermined value which is not unique to the mobile terminal.

1       59. The mobile terminal of claim 58, wherein when the first selected parameter  
2 is in a reserved range of values, the mobile terminal releases its radio connection with  
3 the radio access network.

1       60. The radio access network of claim 58, wherein the first selected parameter is  
2 included in a mobile terminal global identity information element of the omnibus  
3 release message.

1       61. The mobile terminal of claim 58, wherein the first selected parameter is  
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the  
3 release message.

1       62. The mobile terminal of claim 61, wherein the first selected parameter is in a  
2 Serving Radio Network Temporary Identity (S-RNTI) information element of the  
3 release message.

1       63. The mobile terminal of claim 58, wherein the release message is received on  
2 a common control channel (CCCH) when the mobile terminal is in a CELL\_FACH  
3 state.

1       64. The mobile terminal of claim 58, wherein the release message is received on  
2 a paging channel (PCH).